Kuenja Chung/R6/USEPA/US
05/28/2008 12:46 PM

To Kent Curtis <Kent-Curtis@cherokee.org>
cc Aunjanee Gautreaux/R6/USEPA/US@EPA, "CNEP-AirNow" <grpUd-Oes_AirNow@cherokee.org>, Julie.Swift@erg.com, kent.stafford@deq.state.ok.us
bcc
Subject Re: brief summary of Cherokee Nation VOC project results

Kent

Thanks for your summary.
I am looking forward to seeing the final report.
Please let me know for any questions.
Kuenja

Kuenja Chung, Ph. D.
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Kent Curtis <Kent-Curtis@cherokee.org>

Kent Curtis
<Kent-Curtis@cherokee.org>
05/28/2008 11:45 AM

To "CNEP-AirNow" <grpUd-Oes_AirNow@cherokee.org>, Aunjanee Gautreaux/R6/USEPA/US@EPA, Kuenja Chung/R6/USEPA/US@EPA, <kent.stafford@deq.state.ok.us>
cc <Julie.Swift@erg.com>
Subject brief summary of Cherokee Nation VOC project results

The Cherokee Nation has completed the collection of VOC samples (6L canisters analyzed via TO-15) at its Cherokee Heights site near Pryor, Oklahoma. 93 valid samples were collected during an 18-month period (October 2006 to March 2008). Each sample was analyzed by ERG in RTP, North Carolina for a suite of 60 VOCs. Sample results were compared to EPA Region 6 Human Health Medium-Specific Screening Levels (chronic inhalation toxicity values and screening values for ambient air), ODEQ MAACs, and ATSDR Minimal Risk Levels (MRLs) for inhalation. Only 8 VOCs exceeded one or more of these benchmarks in one or more samples, and only one of them (acrolein) exceeded a MAAC or an MRL more than once. These 8 VOCs and their concentration ranges over 93 samples were as follows:

Chloromethane (0.39 to 1.91 ug/m3), exceeded an EPA, ODEQ, and/or ATSDR benchmark in 44 samples;

1,3-Butadiene (ND to 0.21 ug/m3), exceeded a benchmark in 14 samples;

Acrolein (0.18U to 4.30 ug/m3), exceeded a benchmark in 91 samples;

Chloroform (ND to 0.19 ug/m3), exceeded a benchmark in 31 samples;

1,2-Dichloroethane (ND to 0.12 ug/m3), exceeded a benchmark in only 1 sample;

Benzene (0.17 to 1.09 ug/m3, with one anomalously high value of 3.81 ug/m3), exceeded a benchmark in all 93 samples;

Carbon tetrachloride (0.21 to 1.05 ug/m3), exceeded a benchmark in all 93 samples;

Trichloroethylene (TCE) (ND to 0.54 ug/m3), exceeded a benchmark in 11 samples.

No seasonal trends were apparent in the occurrences and concentrations of any of the 60 VOCs surveyed.

VOC concentrations at Cherokee Heights tended to be lower than the concentrations of the same VOCs in the ODEQ data for Tulsa in 2006. Thus it seems that it is safer to breathe the air at Cherokee Heights than it is to breathe the air in Tulsa, at least as far as VOCs are concerned.

ERG is preparing a detailed report for the entire project at Cherokee Heights. This report will be completed in June, 2008. I will be glad to share data for this project with you after the ERG report is finalized.

Kent Curtis
Cherokee Nation Environmental Programs
918-453-5095
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Ryan Callison
<Ryan-Callison@cherokee.org>

05/28/2008 11:53 AM

To "Kent Curtis" <Kent-Curtis@cherokee.org>, "CNEP-AirNow" <grpUd-Oes_AirNow@cherokee.org>, Aunjanee Gautreaux/R6/USEPA/US@EPA, Kuenja
cc <Julie.Swift@erg.com>, Mike Jones/RTP/USEPA/US@EPA, Laura McKelvey/RTP/USEPA/US@EPA, "CNEP-AirNow" <grpUd-Oes_AirNow@cherokee.org>
bcc

Subject RE: brief summary of Cherokee Nation VOC project results

Thanks Kent,

We will look forward to the finished data report from ERG. All project data is/will be in AQS for use.

We would also like to thank everyone involved in our Community Air Toxics project. These projects are important to the states/tribes for evaluating risks associated with these environmental issues. Your patience in working with our group is much appreciated. We look forward to more air toxics projects in the future.

Thanks,

Ryan Callison

From: Kent Curtis
Sent: Wednesday, May 28, 2008 11:46 AM
To: CNEP-AirNow; 'Gautreaux.Aunjanee@epamail.epa.gov'; 'Chung.Kuenja@epamail.epa.gov'; 'kent.stafford@deq.state.ok.us'
Cc: 'Julie.Swift@erg.com'
Subject: brief summary of Cherokee Nation VOC project results

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